

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Keisha Douglas

Timestamp: [year=2009; month=3; day=13; hr=16; min=22; sec=33; ms=803;]

=====

Application No: 10589902 Version No: 2.0

Input Set:

Output Set:

Started: 2009-02-23 17:51:03.872
Finished: 2009-02-23 17:51:07.299
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 427 ms
Total Warnings: 14
Total Errors: 0
No. of SeqIDs Defined: 26
Actual SeqID Count: 26

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24)
W 213	Artificial or Unknown found in <213> in SEQ ID (25)
W 213	Artificial or Unknown found in <213> in SEQ ID (26)

SEQUENCE LISTING

<110> WAKITA, Takaji
KATO, Takanobu
DATE, Tomoko
MIYAMOTO, Michiko
TANABE, Jun-ichi
SONE, Saburo

<120> NUCLEIC ACID CONSTRUCT CONTAINING FULL LENGTH GENOME OF HUMAN
HEPATITIS C VIRUS ... AND METHOD OF PRODUCING HEPATITIS C VIRUS
PARTICLE

<130> 1254-0321PUS1

<140> 10589902

<141> 2009-02-23

<150> PCT/JP2005/003232

<151> 2005-02-21

<150> JP 2004-045489

<151> 2004-02-20

<160> 26

<170> PatentIn version 3.5

<210> 1

<211> 340

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(340)

<223> 5' non-translated region of hepatitis C virus genomic RNA derived
from JFH-1 clone

<400> 1

accugcccu aauagggcg acacuccgccc augaaucacu ccccugugag gaacuacugu 60

cuucacgcag aaagcgccua gcccauggcgu uaguaugagu gucguacagc cuccaggccc 120

cccccucccc ggagagccau aguggucugc ggaaccggug aguacaccgg aauugccggg 180

aagacugggu ccuuucuugg auaaacccac ucuaugcccg gccauuuggg cgugcccccg 240

caagacugcu agccgaguag cguuggguug cgaaaggccu ugugguacug ccugauaggg 300

cgcuugcgag ugccccggga ggucucguag accgugcacc 340

<210> 2

<211> 573

<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(573)
<223> core protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 2
augagcacaa auccuaaacc ucaaagaaaa accaaaagaa acaccaaccg ucggccagaa 60
gacguuaagu ucccgggcgg cggccagauc guuggcggag uauacuuguu gccgcgcagg 120
ggccccaggu uggugugugcg cacgacaagg aaaacuucgg agcgguccca gccacguggg 180
agacgccagc ccauccccaa agaucggcgc uccacuggca aggccugggg aaaaccaggu 240
cgccccuggc cccuauaugg gaaugaggga cucggcuggg caggauggcu ccuguccccc 300
cgaggcucuc gccccuccug gggcccccacu gaccccccggc auaggucgcg caacgugggu 360
aaagucaucg acaccuaac guguggcuuu gccgaccuca uggttacau ccccgucgua 420
ggcgccccgc uuaguggcgc cgccagagcu gucgccgcacg gctttttttt ccuggaggac 480
gggguuuauu augcaacagg gaaccuaccc gguuucccu uuucuaucuu cuugcuggcc 540
cuguuguccu gcaucaccgu uccggucucu gcu 573

<210> 3
<211> 576
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(576)
<223> E1 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 3
gcccagguga agaaauaccag uagcagcuac auggugacca augacugcuc caaugacagc 60
aucacuuggc agcucgaggc ugcgguucuc cacgucccg ggugcguccc gugcgagaga 120
guggggaaaua cgucacggug uugggugcca gucucgccaa acauggcugt gcggcagccc 180
ggugcccuca cgcaggguu gctggacgcac aucgauaugg uugugauugt cgccaccuu 240
ugcucugcuc ucuacguggg ggaccucugt ggctgggugt ugcucgcggc ccagguguu 300
aucgucucgc cgcaguacca cugguuugug caagaaugca auugcuccau cuaccuggc 360

accaucacug gacaccgcau ggcauggggac augaugauga acuggucgcc cacggccacc 420
augauccugg cguacgugau gcgcgucccc gaggucauca uagacaucgu uagcggggcu 480
cacuggggcg ucauguucgg cuuggccuac uucucuaugc agggagcug ggcgaagguc 540
auugucaucc uucugcuggc cguggggug gacgug 576

<210> 4
<211> 1290
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(1290)
<223> E2 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 4
ggcaccacca ccguuggagg cgugugca cguuccacca acgugauugc cggcguguuc 60
agccauggcc cucagcagaa cauucagcuc auuaacacca acggcaguug gcacaucaac 120
cguacugccu ugaaauugcaa ugacuccuug aacaccggcu uucucgcggc cuuguucuac 180
accaaccgcu uuaacucguc agggugucca gggcgccugu ccgcccugccg caacaucgag 240
gcuuuccgga uagguggggg caccuacag uacgaggaua augucaccaa uccagaggau 300
augaggccgu acugcuggca cuacccccc aagccgugug gcguaguccc cgcgaggucu 360
guguguggcc caguguacug uuucacccccc agcccgguag uagugggcac gaccgacaga 420
cguggagugc ccaccuacac auggggagag aaugagacag augucuuccu acugaacagc 480
acccgaccgc cgccaggcuc augguucggc ugcacgugga ugaacuccac ugguuuucacc 540
aagacuugug gcgcgccacc uugccgcacc agagcugacu ucaacgcccag cacggacuug 600
uugugccua cggauuguuu uaggaagcau ccugaugcca cuuauauuaa gugugguucu 660
gggcccuggc ucacacaaa gugccugguc cacuacccuu acagacucug gcauuacccc 720
ugcacaguca auuuuaccau cuucaagaua agaauguaug uaggggggg uaggcacagg 780
cucacggccg caugcaacuu cacucguggg gaucgcugcg acuuggagga cagggacagg 840
aguacagcugu cuccucuguu gcacucuacc acggaauggg ccauccugcc cugcaccuac 900
ucagacuuac ccgcuuuguc aacuggucuu cuccaccuuc accagaacau cguggacqua 960
caauacaugu auggccucuc accugcuauc acaaaaauacg ucguucgaug ggagugggug 1020
guacucuuau uccugcucuu agcggacgccc agagucugcg ccugcuugug gaugcucuac 1080

uuguugggcc aggccgaagc agcauuggag aaguuggucg ucuugcacgc ugcgagugcg 1140
gcuaacugcc auggccuccu auauuuugcc aucuucuucg uggcagcuug gcacaucagg 1200
ggucggggugg uccccuugac caccuauugc cucacuggcc uauggcccuu cugccuacug 1260
cucauggcac ugccccggca ggcuuaugcc 1290

<210> 5
<211> 651
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(651)
<223> NS2 protein-coding sequence of hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 5
uaugacgcac cugugcacgg acagauaggc guggguuugu ugauauugau cacccucuuc 60
acacucaccc cgggguaauaa gaccuccuc ggccaguguc uguggugguu gugcuaucuc 120
cugacccugg gggaaagccau gauucaggag ugguuaccac ccaugcaggu gcgcggcggc 180
cgcgauggca ucgcgugggc cgucacuaua uucugcccg gugugguguu ugacauuacc 240
aaauggcuuu ugugguugcu ugugccugcu uaccuuuaa gggccgcuuu gacacaugug 300
ccguacuucg ucagagcuca cgcucugaua agguauugcg cuuuggugaa gcagcucgcg 360
ggggguaggu auguucaggua ggccuauug gcccuggca gguggacugg caccuacauc 420
uaugaccacc ucacaccuaa gucggacugg gccgcuagcg gccugcgcga cuuagcgguc 480
gccguggaac ccaucaucuu caguccgaug gagaagaagg ucaucgucug gggagcggag 540
acggcugcau guggggacau ucuacaugga cuuuccgugu ccgcccgcacu cggccaggag 600
auccuccucg gcccagcuga ugguuacacc uccaaggggua ggaagcuccu u 651

<210> 6
<211> 1893
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(1893)
<223> NS3 protein-coding sequence of hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 6

gcucccauca cugcuuaugc ccagcaaaca cgaggccucc ugggcgccau aguggugagu 60
augacggggc gugacaggac agaacaggcc ggggaagucc aaaucuuguc cacagucucu 120
caguccuucc ucggaacaac caucucgggg guuuuugugga cuguuuacca cggagcuggc 180
aacaagacuc uagccggcuu acgggguccg gucacgcaga uguacucgag ugcugagggg 240
gacuugguag gcuggccag cccccuuggg accaagucuu uggagccgug caagugugga 300
gccgucgacc uauaucuggu cacgcggAAC gcugauguca ucccggcucg gagacgcggg 360
gacaagcggg gagcauugcu cucccgaga cccauuucga cciugaagg guccucgggg 420
gggccggugc ucugccuag gggccacguc guugggcucu uccgaggcagc ugugugcucu 480
cgggcgugg ccaaauccau cgauuucauc cccguugaga cacucgacgu uguuacaagg 540
ucucccacuu ucagugacaa cagcacgcca ccggcugugc cccagaccua ucaggucggg 600
uacuugcaug cuccaacugg caguggaaag agcaccaagg uccuugucgc guaugccgccc 660
cagggguaca aaguacuagu gcuaaaccgc ucgguaagcug ccaccuuggg guuuggggcg 720
uaccuaucca aggcacaugg caucaauccc aacauuagga cuggagucag gaccgugaug 780
accggggagg ccaucacqua cuccacauau ggcaaaauuc ucggccgaugg gggcugcgcu 840
agcggcgccu augacaucuu cauaugcga gaaugccacg cuguggaugc uaccuccauu 900
cucggcaucg gaacgguccu ugaucaagca gagacagccg gggucagacu aacugugcug 960
gcuaacggcca caccccccgg gucagugaca acccccauc ccgauauaga agagguaggc 1020
cucggcgccc agggugagag cccuucuaau gggagggcga uuccccuauc cugcaucaag 1080
ggagggagac accugauuuu cugccacuca aagaaaaagu gugacgagcu cgcggcgccc 1140
cuucggggca ugggcuugaa ugccguggca uacauuagag gguuggacgu cuccauaaua 1200
ccagcucagg gagauguggu gguugcgc accgacgccc ucaugacggg guacacugga 1260
gacuuugacu ccgugaucga cugcaaugua gcggucaccc aagcugucga cuucagccug 1320
gaccccaccu ucacuauaac cacacagacu gucccacaag acgcugucuc acgcagucag 1380
cgccgcgggc gcacagguag aggaagacag ggcacuuaua gguauuuuc cacuggugaa 1440
cgagccucag gaauguuuga caguguagug cuuugugagu gcuacgacgc aggggcugcg 1500
ugguacgauc ucacaccagc ggagaccacc gucaggcuua gagcguauuu caacacgccc 1560
ggccuacccg ugugucaaga ccaucuugaa uuuuggagg caguuuucac cggccucaca 1620
cacauagacg cccacuuccu cucccaaaca aagcaagcgg gggagaacuu cgctguaccua 1680

guagccuacc aagcuacggu gugcgccaga gccaaaggccc cuccccguc cugggacgcc 1740

auguggaagu gccuggcccg acucaagccu acgcuugcgg gccccacacc ucuccuguac 1800

cguuugggcc cuauuaccaa ugaggucacc cucacacacc cugggacgaa guacaucgcc 1860

acaugcaugc aagcugaccu ugagguaug acc 1893

<210> 7

<211> 162

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(162)

<223> NS4A protein-coding sequence of hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 7

agcacguggg uccuagcugg aggaguccug gcagccgucg ccgcauauug ccuggcgacu 60

ggaugcguuu ccaucaucgg ccgcuugcac gucaaccagc gagucgucgu ugcgccggau 120

aaggaggucc uguauugaggc uuuugaugag auggaggaau gc 162

<210> 8

<211> 783

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(783)

<223> NS4B protein-coding sequence of hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 8

gccucuaggg cggcucuau cgaagagggg cagcgauag ccgagauguu gaaguccaag 60

auccaaggcu ugcugcagca ggcucuuaag caggcccagg acauacaacc cgcuaugcag 120

gcuucauggc ccaaagugga acaauuuugg gccagacaca uguggaacuu cauuagcggc 180

auccaauacc ucgcaggauu guaacacug ccagggAACCC ccgcgguggc uuccaugaug 240

gcauucagug ccgcccucac caguccguug ucgaccagua ccaccauccu ucuacaauc 300

augggaggcu gguuagcguc ccagaucgca ccaccggcgg gggccaccgg cuuugucguc 360

aguggccugg uggggcugc cgugggcagc auaggccugg guaaggugcu gguggacauc 420

cuggcaggau auggugcggg cauuucgggg gcccucguag cauucaagau caugucuggc 480
gagaagccu cuauggaaga ugucaucaa cuacugccug ggauccuguc uccgggagcc 540
cugguggugg gggucaucug cgcgcccauu cugcgccgcc acgugggacc gggggagggc 600
gcgguccaaau ggaugaacag gcuuauugcc uuugcuucca gagaaacca cgucgccccu 660
acucacuacg ugacggaguc ggaugcguag cagcguguga cccaaacuacu uggcucucuu 720
acuauaacca gccuacucag aagacuccac aauuggauaa cugaggacug ccccauccca 780
ugc 783

<210> 9
<211> 1398
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(1398)
<223> NS5A protein-coding sequence of hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 9
uccggauccu ggcuccggcga cgugugggac uggguuugca ccaucuugac agacuucaaa 60
aauuggcuga ccucuaaauu guuccccaaag cugccgggcc uccccuucau cucuugucaa 120
aaggguaca agggugugug ggccggcacu ggcaucauga ccacgcgcug cccuugcggc 180
gccaacaucu cuggcaaugu ccggcugggc ucuaugagga ucacagggcc uaaaaccugc 240
augaacaccu ggcaggggac cuuuccuauc aauugcuaca cggagggcc gugcgcccg 300
aaaccccca cgaacuacaa gaccggcauc uggagggugg cggccucggg guacgcccgg 360
gugacgcagc augggucgua cuccuaugua acaggacuga ccacugacaa ucugaaaaauu 420
ccuugccaaac uaccuucucc agaguuuuuc uccugggugg acggugugca gauccauagg 480
uuugcaccca caccaaagcc guuuuuuccgg gaugaggugu cguucugcgu ugggcuuuaau 540
uccuaugcug ucggguccca gcuuuccugu gaaccugagc ccgacgcaga cguauugagg 600
uccaugcuua cagauccggc ccacaucacg gcgagacug cggcgccggc cuuggcacgg 660
ggaucaccuc caucugaggc gagcuccuca gugagccagc uaucagcacc gugcgugcgg 720
gccaccugca ccaccacag caacaccua gacguggaca uggucaugc caaccugcuc 780
auggagggcg guguggcuca gacagagccu gaguccagg ugcccguucu ggacuuucuc 840
gagccaaugg ccgaggaaga gagcgaccuu gagccucaa uaccaucgga gugcaugcuc 900

cccaggagcg gguuuuccacg ggccuuaccg gcuugggcac ggccugacua caacccgccc 960
cucguggaaau cguggaggag gccagauuac caaccgcccc csguugcugg uugugcucuc 1020
ccccccccca agaaggcccc gacgccuccc ccaaggagac gccggacagu gggucugagc 1080
gagagcacca uaucagaagc ccuccagcaa cuggccauca agaccuuugg ccagcccccc 1140
ucgagcggug augcagggcuc guccacgggg gcggggcgccg cggaaucgg cgguccgacg 1200
uccccuggug agccggcccc cucagagaca gguuccgccc ccucuaugcc cccccucgag 1260
ggggagccug gagauccgga ccuggagucu gauagguag agcuucaacc ucccccag 1320
gggggggggg uagcuuccgg uucgggcucg gggucuuggu cuacuugcuc cgaggaggac 1380
gauaccacccg ugugcugc 1398

<210> 10
<211> 1773
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(1773)
<223> NS5B protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 10
uccauguau acuccuggac cggggcucua auaacuccu guagccccga agagggaaaag 60
uugccaaaua accuuuugag uaacucgcug uugcgauacc auaacaaagg guacuguaca 120
acaucaaaga gcgccucaca gagggcuaaa aagguaacuu uugacaggac gcaagugcuc 180
gacgccccauu augacucagu cuuaaaggac aucaagcuag cggcuuccaa ggucagcgca 240
aggcuccuca ccuuggagga ggcgugccag uugacuccac cccauucugc aagauccaag 300
uauggauucg gggccaagga gguccgcagc uuguccggga gggccguuaa ccacaucaag 360
uccgugugga aggaccuccu ggaagaccca caaacaccaa uucccacaac caucauggcc 420
aaaaaugagg uguucugcgu ggaccccgcc aagggggua agaaaccagc ucgccucauc 480
guuuacccug accucggcgu cggggcugc gagaaaaugg cccucuauga cauuacacaa 540
aagcuuccuc aggcguaau gggagcuucc uauggcuucc aguacucccc ugcccaacgg 600
guggaguauc ucuugaaagc augggcggaa aagaaggacc ccauggguuu uucguauugau 660
acccgaugcu ucgacucaac cgucacugag agagacauca ggaccgagga guccauauac 720

caggccugcu cccugcccga ggaggccccgc acugccauac acucgcugac ugagagacuu	780
uacguaggag ggcccuauguu caacagcaag ggucaaaccu gcgguuacag acguugccgc	840
gccagcgaaa ugcuaaccac uagcaugggu aacaccauca caugcuaugu gaaagccua	900
gcggccugca aggugcggg gauaguugcg cccacaaugc ugguaugcgg cgaugaccua	960
guagucaucu cagaaagcca ggggacugag gaggacgagc ggaaccugag agccuucacg	1020
gaggccauga ccagguacuc ugccccuccu ggugaucccc ccagaccgga auaugaccug	1080
gagcuaauaa cauccuguuc cuaaaaugug ucuguggcgu ugcccggcg gggccggcg	1140
agauacuacc ugaccagaga cccaaaccacu ccacucgccc gggcugccug ggaaacaguu	1200
agacacuccc cuaucaauuc auggcuggga aacaucaucc aguaugcucc aaccauaugg	1260
guucgcaugg uccuaaugac acacuuucuuc uccauucuca ugguccaaga cacccuggac	1320
cagaaccuca acuuugagau guauggauca guauacuccg ugaaucuuu ggaccuucca	1380
gccaauauug agagguuaca cggcuugac gccuuuucua ugcacacaua cucucaccac	1440
gaacugacgc ggguggcuuc agcccucaga aaacuugggg cgccacccu cagggugugg	1500
aagagucggg cucgcgcagu cagggcgucc cuaucuccc guggagggaa agcggccguu	1560
ugcggccgau aucucuucaa uugggcggug aagaccaagc ucaaacucac uccauugccg	1620
gaggcgcgcc uacuggacuu auccaguugg uucaccgucg gcgccggcgg gggcgacauu	1680
uuucacagcg ugucgcgcgc ccgaccccgc ucauuacucu ucggccuacu ccuacuuuuc	1740
guagggguag gccucuuuccu acuccccgcu cgg	1773

<210> 11
 <211> 239
 <212> RNA
 <213> Hepatitis C virus

<220>
 <221> misc_feature
 <222> (1)..(239)
 <223> 3' non-translated region of hepatitis C virus genomic RNA derived
 from JFH-1 clone

<400> 11	
uagagcggca cacacuaggua acacuccaua gcuaacuguu ccuuuuuuuu uuuuuuuuuu	60
uuuuuuuuuu uuuuuuuuuu uuuuuuuuuu uuuuuuuuuu cccucuuuucu uccuuucuca	120
ucuuauucua cuuucuuuucu ugugggcucc aucuuagccc uaguacggc uagcugugaa	180
agguccguga gccgcaugac ugcagagagu gccguaacug gucucucugc agaucaugu	239

<210> 12
<211> 9678
<212> RNA
<213> Hepatitis C virus

<220>
<221> misc_feature
<222> (1)..(9707)
<223> full-length Hepatitis C virus genomic RNA derived from JFH-1 clone

<400> 12

accugcccu aauagggcg acacuccgccc augaaucacu ccccugugag gaacuacugu 60
cuucacgcag aaagcgccua gcccauggcgu uaguaugagu gucguacagc cuccaggccc 120
cccccucccg ggagagccau aguggucugc ggaaccggug aguacaccgg aauugccggg 180
aagacugggu ccuuuucuugg auaaacccac ucuaugcccg gccauuuggg cgugcccccg 240
caagacugcu agccgaguag cguugggug cgaaaggccu ugugguacug ccugauaggg 300
cgcuugcgag ugccccggga ggucucguag accgugcacc augagcacaa auccuaaacc 360
ucaaagaaaa accaaaagaa acaccaaccg ucgcccagaa gacguuaagu ucccggcg 420
cgcccgagauc guuggcgag uauacuuguu gccgcgcagg ggccccaggu ugugugugcg 480
cacgacaagg aaaacuucgg agcgguccca gccacguggg agacgcccagc ccauccccaa 540
agaucggcgc uccacuggca aggccugggg aaaaccaggu cgccccuggc cccuauaugg 600
gaaugagggg cucggcuggg caggauggcu ccuguccccc cgaggcucuc gccccuccug 660
gggccccacu gaccccggc auaggucgcg caacgugggu aaagucaucg acacccuaac 720
guguggcuuu gccgaccuca ugugguacau ccccgucgua ggccgcggc uuaguggcg 780
cgccagagcu gucgccgcacg gcgugagagu ccuggaggac gggguuaauu augcaacagg 840
gaaccuaccc gguuuucccu uuucuaucuu cuugcugggc cuguuguccu gcaucaccgu 900
uccggucucu gcugcccagg ugaagaauac caguagcagc uacaugguga ccaauggac 960
cuccaaugac agcaucacuu ggcagcucga ggcugcgguu cuccacgucc ccgggugcgu 1020
cccgugcgag agagugggga auacgucacg guguugggug ccagucucgc caaacauggc 1080
ugugcggcag cccggugccc ucacgcagg ucugcggacg cacaucgaua ugguugugau 1140
guccgccacc uucugcucug cucucuacgu gggggaccuc uguggcgggg ugaugcucgc 1200
ggcccaggug uucaucgucu cgccgcagua ccacugguu gugcaagaau gcaauugcuc 1260

caucuacccu ggcaccauca cuggacaccg cauggcaugg gacaugauga ugaacugguc 1320

gcccacggcc accauga